



National Renewable Energy Laboratory

Request for Proposals (RFP) Number RDJ-3-33600

“Outdoor Testing and Monitoring of Thin Film Modules in Hot and Humid Climates”

REQUEST FOR PROPOSALS READ THIS DOCUMENT CAREFULLY

This solicitation is being conducted under the streamlined procedures for competitive subcontracts established by the National Renewable Energy Laboratory (NREL).

NREL will award a subcontract based on the following.

- All Statement of Work (SOW) requirements being met
- The best combination of:
 - Technical factors (based on qualitative merit criteria)
 - and
 - Evaluated cost

Issue Date: 11/25/02

Due Date: 01/27/03

Time Due: 5:00 P.M. Mountain Time

Technical Questions must be received in writing no later than 12/23/02

- 1. Solicitation Type** Best Value Selection
Cost Reimbursable

Submit offers to and request information from the NREL RFP Contact below

- 2. NREL RFP Contact** Vicki Riddell, Subcontract Administrator
MS 2713
National Renewable Energy Laboratory
1617 Cole Boulevard
Golden, CO 80401-3393
Phone: (303) 384-7457
Fax: (303) 384-7397
Email: vicki_riddell@nrel.gov

Electronic (PDF or Word) copies of forms and appendices can be found at:
http://www.nrel.gov/contracts/related_docs.html

3. Project description

As specified in the Statement of Work (Attachment 1).

Offerors will note that NREL intends that thin film modules for investigation under the statement of work will be provided by the manufacturers of such modules on an “as is” basis at no cost, f.o.b. subcontractor’s designated location. Under the terms and conditions of the subcontract, each subcontractor will be responsible to ensure that (a) module delivery comports with the subcontract schedule, (b) the subcontractor conducts timely inspection and immediately reports any unsatisfactory condition of the modules, and (c) the subcontractor adequately manages and protects the modules during the term of the subcontract. At the completion of the subcontract period, NREL will reimburse the subcontractor the cost of shipping back to the manufacturer or to NREL, as directed by the NREL Subcontract Administrator, all test modules, regardless of condition.

THE THIN FILM MODULES PROVIDED UNDER ANY SUBCONTRACT RESULTING FROM THIS SOLICITATION SHALL NOT BE CLASSIFIED GOVERNMENT FURNISHED PROPERTY AND NEITHER THE UNITED STATES, NOR THE DEPARTMENT OF ENERGY, NOR MIDWEST RESEARCH INSTITUTE, NATIONAL RENEWABLE ENERGY LABORATORY DIVISION, NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR EMPLOYEES MAKE ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUME ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE THIN FILM MODULES PROVIDED AS TEST AND RESEARCH PROPERTY.

4. Proposed subcontract award and period of performance

It is the intent of NREL to award one (1) to four (4) cost reimbursable-type subcontract(s) under this solicitation. The anticipated period of performance is thirty-six (36) months with *annual* funding availability of approximately \$400,000 in total (not per award).

5. Competitive negotiated subcontract using Best Value Selection

This solicitation shall be conducted using Best Value Selection that results in an award that is most advantageous to NREL based on the best value combination of (a) evaluated qualitative merit and (b) evaluated cost of the offers submitted.

Best Value Selection is based on the premise that, if all offers are of approximately equal qualitative merit, award will be made to the offeror with the lowest evaluated cost. However, NREL will consider awarding to an offeror with a higher evaluated cost if the offer demonstrates the difference in cost is commensurate with the higher qualitative merit. Conversely, NREL will consider awarding to an offeror with a lower evaluated qualitative merit if the cost differential between it and other offers warrant doing so.

6. Qualification requirements

The following criteria must be met by each offer to this Solicitation. NREL will eliminate, at its sole discretion, any proposal that does not meet the criteria below. **Offerors failing to meet these criteria will not be evaluated for an award and will be considered non-responsive to this solicitation.**

- Offers will be accepted only if submitted by a U.S. organization or U.S. company (incorporated and operating within the United States)
- The proposed location for performance of the work must meet the following climate specification:

Annual 'Humidity Ratio (weight of water vapor to air) of over 0.01

Humidity ratio must be documented. Offerors shall use the following web site (http://rredc.nrel.gov/solar/old_data/nsrdb/bluebook/state.html) to find the humidity ratio for the geographic location listed which is closest to the location where the work will be performed. For example, for Miami, the appropriate line can be found by opening the Miami, FL, URL at that site, (http://rredc.nrel.gov/solar/old_data/nsrdb/bluebook/data/12839.SBF), to get:

"Hum Ratio", "#w/#air ",0.0105,0.0105,0.0115,0.0122,0.0144,0.0167,0.0173,0.0176,0.0174,0.0151,0.0128,0.0111,**0.0139**

which can be found 17 lines from the bottom of the text file at that URL. *The last number – 0.0139 – is the average annual humidity ratio in Miami.* Since humidity ratio reflects both water vapor and temperature, it is a fair way to evaluate proposed test sites.

NREL will consider slight exceptions to the humidity ratio requirement if the offeror contacts NREL in advance to allow a specific judgment to be made. An exception, with appropriate justification, must be submitted as a Technical Question, per Page 1 herein, and is due by 12/23/02.

7. Qualitative merit criteria for Best Value Selection

The Statement of Work (Attachment 1) in this Request for Proposals serves as NREL's baseline requirements that must be met by each offer.

The qualitative merit criteria establish what NREL considers the technical factors valuable in an offer. These qualitative merit criteria are performance-based and permit selection of the offer(s) that provide(s) higher qualitative merit for a reasonable, marginal increase in cost.

The following qualitative merit criteria will be used by evaluators to determine the technical value of the offer in meeting the objectives of the solicitation.

Each qualitative merit criteria and its assigned weight are provided below:

- a. **Technical Approach (50%)** – Is the technical approach clearly stated with a detailed plan as to how the tasks from the Statement of Work will be accomplished? Is the plan reasonable, and will the deliverables be achievable as a result? Will the plan meet the objectives as detailed in the Statement of Work? Are potential difficulties and contingencies identified and incorporated in the plan?
- b. **Experience (25%)** – What is the experience and record of success of the Offeror in the area of outdoor testing of modules and arrays (including the installation, monitoring, degradation detection in modules, array/monitoring system quality and maintenance)?
- c. **Capability (25%)** – Does the Offeror have adequate resources to implement the proposed project, including proper monitoring and measuring equipment and installation capability? Does the proposed staff have the technical knowledge and expertise to perform the stated tasks? Does the proposed staff have time available to perform the tasks?

8. Cost evaluation for Best Value Selection

After evaluation of the qualitative merit criteria, the following cost evaluation will be used to determine the best value of the offer in meeting the objectives of the solicitation.

The combined qualitative merit value will be considered substantially more important than the cost.

9. Evaluation process

NREL will evaluate offers in two general steps:

Step One—Initial Evaluation

An initial evaluation will be performed to determine if all required information, including a description of annual humidity ratio *at or near the proposed location* in accordance with Section 6 – Qualification Requirements – above, has been provided for an acceptable offer. Offerors may be contacted only for clarification purposes during the initial evaluation. Offerors shall be notified if their offer is determined unacceptable and the reasons for rejection will be provided. Unacceptable offers will be excluded from further consideration.

Step Two—Discussion, Selection, Negotiation, and Award

All acceptable offers will be evaluated against the Statement of Work (Attachment 1) and the qualitative merit criteria listed above. Based on this evaluation, NREL has the option, depending on the specific circumstances of the offers received, to use one of the following methods of selection:

- (a) make an individual selection, conduct negotiations, and make an award;
- (b) conduct parallel negotiations with all offerors and make award(s);
- (c) conduct discussions with all offerors, select successful finalists, conduct parallel negotiations with successful finalists, and then make award(s);
- (d) conduct discussions with all offerors, conduct parallel negotiations with the finalists, select successful finalist(s), and then make award(s);
- (e) select successful finalists, conduct successive negotiations, and make successive selections and awards;
- (f) make no award(s).

10. Proposal preparation information

- a. The proposal must include a **title page**, including the RFP title and number, name of your organization and principal investigator (with postal address, telephone and fax numbers, and email address).
- b. Formatting instructions
 - A page is defined as one side of an 8 ½" x 11" sheet of paper.
 - Use a 12-point font.
 - Maintain at least 1-inch margins on all sides.
 - Copies may be either single or double sided.
- c. **A technical proposal** in an original and ten (10) copies directed toward meeting the requirements of NREL's Statement of Work (Attachment 1) [and qualitative merit criteria (see section 7 above)]. The technical proposal shall be organized in the following sections:
 1. Executive Summary – to include why the proposal meets the qualification requirements and the qualitative merit criteria.
 2. Introduction
 3. Technical Approach - including a detailed plan as to how the tasks in the Statement of Work will be accomplished.
 4. Statement of Work - properly modified version of Attachment 1 for actual proposed work, including milestone schedule and deliverables.
 5. Experience and Capabilities – including documentation to address qualitative merit criteria, proposed staff (with resumes, and their proposed responsibilities/activities), equipment, facilities, etc.

The total technical proposal shall not exceed twenty (20) pages (resumes not included in page count).

- d. A completed **"Price/Cost Proposal"** form in an original and ten (10) copies submitted with the offer. An individual offeror's price/cost proposal standard format can be used if the data included is substantially the same as the NREL form. The offeror's cost and delivery terms must be valid for 90 days from the date of the offer. A price/cost proposal form must be submitted for each year, plus a total for all years. The price/cost proposal should include support documentation for all categories of the

- proposed cost. The price/cost proposal should separate price/cost for lower-tier subcontract(s) and include support documentation for all categories of the proposed lower-tier subcontract(s) price/cost. A fillable PDF version of the Cost/Price Proposal form, including preparation instructions may be found on NREL's web site at: http://www.nrel.gov/contracts/pdfs/price_cost_form.pdf.
- e. A completed “**Representations and Certifications**” form in an original and ten (10) copies. The Representations and Certifications form can be found on NREL's web site at: http://www.nrel.gov/contracts/related_docs.html
 - f. A completed “**Organizational Conflicts of Interest Disclosure Advisory and Assistance Subcontracts**” in an original and ten (10) copies. This form can be found on NREL's web site at: http://www.nrel.gov/contracts/related_docs.html
 - g. A completed **NEPA questionnaire** in an original and ten (10) copies. The NEPA questionnaire is available on NREL's web site at: http://www.nrel.gov/contracts/related_docs.html
 - h. A **cover letter** including a **summary of deviations/exceptions** (if any) to the subcontract schedule (a sample subcontract schedule is included as part of this solicitation as Attachment 2) and the standard terms and conditions and/or the intellectual property terms and conditions in the appendices (available at: http://www.nrel.gov/contracts/related_docs.html). The offeror will explain any exceptions (including deviations and conditional assumptions) taken with respect to the subcontract schedule and terms and conditions. Any exceptions must contain sufficient amplification and justification to permit evaluation. Such exceptions will not, of themselves, automatically cause an offer to be termed unacceptable. A large number of exceptions or one or more significant exceptions not providing any obvious benefit to the Department of Energy or NREL may, however, result in rejection of such offer as unacceptable.
 - i. This solicitation does not allow the submittal of facsimile or electronic proposals.
 - j. This solicitation does not commit NREL to pay costs incurred in the preparation and submission of a proposal in response to this RFP.

11. Solicitation Provisions—full text provided

a. Late submissions, modifications, and withdrawals of offers

Offers, or modifications to them, received from qualified organizations after the latest date specified for receipt may be considered if received prior to award, and NREL determines that there is a potential cost, technical, or other advantage, as compared to the other offers received. However, depending on the circumstances surrounding the late submission or modification, NREL may consider a late offer to be an indication of the offeror's performance capabilities, resulting in downgrading of the offer by NREL evaluators in the technical evaluation process. Offers may be withdrawn by written notice or telegram (including mailgram) received at any time before award. Offers may be withdrawn in person by an offeror or an authorized representative, if

the representative's identity is made known and the representative signs a receipt for the offer before award.

b. Restrictions on disclosure and use of proposal data

Offerors who include in their proposals data that they do not want disclosed to the public for any purpose or used by the government or NREL, except for evaluation purposes shall—

1. Mark the title page with the following legend:
“This offer includes data that shall not be disclosed outside the government or NREL and shall not be used or disclosed—in whole or in part—for any purpose other than to evaluate this offer. If, however, a subcontract is awarded to this offeror as a result of—or in connection with—the submission of this data, the government or NREL shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting subcontract. This restriction does not limit the government or NREL's right to use information contained in this data if obtained from another source without restriction. The data subject to this restriction are contained on pages [insert page and line numbers or other identification of pages] of this offer”; and
2. Mark each page of data it wishes to restrict with the following legend:
“Use or disclosure of data contained on this page is subject to the restriction on the title page of this offer.”

c. Notice of right to receive patent waiver (derived from DEAR 952.227-84) and technical data requirements.

Offerors (and their prospective lower-tier subcontractors) in accordance with applicable statutes and Department of Energy Acquisition Regulations, (derived from DEAR 952.227-84) have the right to request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of the subcontract that may be awarded as a result of this solicitation, in advance of or within thirty (30) days after the effective date of subcontracting. Even where such advance waiver is not requested or the request is denied, the subcontractor will have a continuing right during the subcontract to request a waiver of the rights of the United States in identified, individual inventions.

Domestic small business firms, educational institutions, and domestic nonprofit organizations normally will receive the Patent rights clause—retention by the subcontractor—which permits the offeror to retain title to subject inventions, except in subcontracts involving exceptional circumstances or intelligence activities. Therefore, domestic small business firms, educational institutions, and domestic nonprofit organizations normally need not request a waiver.

If an offeror's proposal includes a lower-tier subcontract to another organization, that lower-tier organization's business type will determine the applicable intellectual

property provisions that will apply to the lower-tier subcontract. Note that a lower-tier subcontractor may apply for a patent waiver under the same conditions as the offeror.

Under a research, development, and demonstration project, the Department of Energy and NREL are unable to ascertain, prior to receipt of offers or performance of the project, their actual needs for technical data. It is believed that the requirements contained herein are the basic needs of the Department of Energy and NREL. However, if the offeror indicates in its proposal that proprietary data will be used or withheld under its proposed effort, the Department of Energy and NREL reserve the right to negotiate appropriate rights to the proprietary data. The appropriate rights may include "Limited Rights in Proprietary Data" and/or "Subcontractor Licensing."

d. Disclaimer

NEITHER THE UNITED STATES; NOR THE DEPARTMENT OF ENERGY; NOR MIDWEST RESEARCH INSTITUTE, NATIONAL RENEWABLE ENERGY LABORATORY DIVISION; NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR THEIR EMPLOYEES MAKE ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUME ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSE OF ANY OF THE TECHNICAL INFORMATION OR DATA ATTACHED OR OTHERWISE PROVIDED HEREIN AS REFERENCE MATERIAL.

e. Solicitation disputes

The General Accounting Office and the Department of Energy do not accept or rule on disputes for solicitations for Requests for Proposals issued by Management and Operating Contractors for the Department of Energy (operators of Department of Energy National Laboratories). Should an offeror have any concerns regarding the NREL solicitation process or selection determination, the offeror may contact Marty Noland, Advocate for Commercial Practices, at (303) 384-7550. NREL will address each concern received from an offeror on an individual basis.

f. (Lower-Tier) Small Business Subcontracting Plan (derived from FAR 52.219-9)

The following requirement does not apply to small business offerors.

Proposals submitted in response to this solicitation shall include a lower-tier subcontracting plan that separately addresses lower-tier subcontracting with small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual subcontract plan, the plan must separately address lower-tier subcontracting with small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic subcontract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant subcontract. The lower-tier subcontracting plan shall be negotiated within the time specified by the NREL Subcontract Administrator. Failure to submit and negotiate a lower-tier subcontracting plan shall make the offeror

ineligible for award of a subcontract. (see http://www.nrel.gov/contracts/related_docs.html).

12. NAICS Code and Small Business Size Standard

- a.** The North American Industry Classification System (NAICS) code [formerly standard industrial classification (SIC)] for this solicitation is/are 54171.
- b.** The small business size standard for 54171 is 500 or fewer employees.